

**ATTACHMENT A
Remarks**

Considering the matters raised in the same order as raised, and turning first to the guidelines for preferred layout for the specification, suitable headings have been provided as required.

Claims 2-14 have been objected because "Claim 1 uses the transitional phrase 'consist'." Claim 1 has been amended so that that phrase is no longer used.

Claims 1-14 have been rejected under 35 U.S.C. 101 "because the claimed invention is directed to non-statutory subject matter."

This rejection is respectfully traversed. The Office Action states "[a]s per claims 1-14, merely claimed as a protocol representing a data abstraction *per se*, that is descriptions or expressions of such a program and that is, descriptive material *per se*, non-functional descriptive material, and non-statutory because it is not a physical 'thing' or a statutory process as they are not 'acts' within being performed."

As indicated in the previous response, claims 1-14 had been canceled and replaced by new claims 15-27. Moreover, claim 15 has been amended further amended to address this objection. Claims 15-27 are drawn to a method and not a "data abstraction." Moreover, the method is directed to a practical application and produces a "real-world" result. Further, the claim recites to "communicating to the user authorization to access said scrambled information ..." and this recitation parallels the example given in the "Overview of Interim Guidelines for Subject Matter Eligibility" under the heading "Tangible." In the latter regard, this section states that "calculating a price of an item to sell and then conveying the calculated price to a potential customer, would be a tangible result." Further, Claim 15 also recites "for comparing said access criteria

with at least one access right stored in memory in the access control module.” The inclusion of such a recitation has also been held to overcome a rejection under 35 U.S.C. 101. Accordingly, it is respectfully submitted that claims 15-27, particularly as amended, are clearly directed to statutory subject matter.

Claims 1-14 have been rejected under 35 U.S.C. 112, second paragraph, as being “indefinite.” It is respectfully submitted that new claims 15-27 overcome this rejection. Because the new claims are method claims they inherently include “functional or operational language.” Moreover, the criticisms that the “structure which goes to make the device must be clearly and positively specified” and that “structure must be organized and correlated in such a manner to present a complete operative device” would not appear to apply to method claims such as are presented here. In any event, it is respectfully submitted that claims 15-27 are fully in accordance with 35 U.S.C. 112, second paragraph.

Claims 1-5 and 7-14 have been rejected under 35 U.S.C. 102(b) as being “anticipated by” the Candelore patent, while claim 6 has been rejected under 35 U.S.C. 103(a) as being “unpatentable over” Candelore in view of Chen. These rejections are respectfully traversed, particularly as applied to new claims 15-27.

Candelore acknowledges that it is known to record content scrambled with a key. However, when this key expires, descrambling of the recorded scrambled data is no longer possible (see column 3, lines 1-9).

In one embodiment, in order to solve this problem, Candelore provides for descrambling the content with the current key upon reception of the scrambled content. This descrambled content is then re-scrambled, using an access key, before being

recorded (column 7, lines 48-52). The access key is changed on a regular basis (column 9, lines 31-33).

The embodiment of Figure 6B teaches sending along with an ECM message containing the current access key, other ECM messages containing respective former access keys. Thus, it is possible to descramble contents scrambled with the former access key (column 10, lines 43-54). In Figure 6B, each ECM contains only one cryptogram of the access key.

In contrast to the teachings of the reference, claim 1 recites that: "said ECM message containing access criteria and the cryptogram of the control word," and "assigning each ECM message a number certifying a monotonic non-decreasing function." Thus, according to the wording of claim 1, each ECM message contains both: a cryptogram of the control word; and a number so that the number assigned to consecutive ECM messages form a monotonic non-decreasing function.

The embodiment of Figures 6B only discloses ECM messages containing one key cryptogram but without "a number so that the number assigned to consecutive ECM messages form a monotonic non-decreasing function." Accordingly, the embodiment of Figure 6B does not disclose step (a) of claim 1.

The Examiner refers to Figures 6B and column 10, lines 43-54 in contending that Candelore discloses selecting the number of an ECM message corresponding to the sending time of a user request to access to a portion of the scrambled information (step (c) of claim 1). It is respectfully submitted that this contention is not well taken. In fact, Figure 6B cannot disclose the action of selecting a number of an ECM message

because, as explained hereinabove, in the embodiment of Figure 6B, the message ECM does not contain such a number.

Furthermore, the embodiment of Figure 6B only discloses selecting a key that corresponds to a given time period. Thus, the selected key only depends at the given time period. This selected key does not depend on the sending time of a user request. Thus, Calderone does not disclose "selecting the number of an access control message corresponding to the sending time of said request" (step (c)).

Consequently, the embodiment of Figure 6B Calderone does not disclose any of steps (b) to (d).

The embodiments of Figure 6C and 6D Calderone disclose respective ECM messages 674 and 675 having: a cryptogram built with a current group or service key: and further cryptograms built with former groups of service keys corresponding to previous times $X + 1, \dots, N$.

Even if it were to be assumed for the sake of argument that the further cryptograms are numbers, Candelore does not indicate that such numbers assigned to consecutive ECM messages form a monotonic non decreasing function. Thus, the ECM messaged used in the embodiments of Figures 6C and 6D cannot represent a timebase. Consequently, the embodiments of Figures 6C and 6D do not disclose step (a) of claim 1.

Similarly to discussion above regarding the embodiment of Figure 6B, the embodiments of Figures 6C and 6D only disclose selecting a key according to a given time period. Accordingly, the embodiments of Figures 6C and 6D do not disclose

selecting a number of an ECM message corresponding to the sending time of a user request (step (c)).

In conclusion, it is respectfully submitted that none of the embodiments of Candelore discloses steps (a) to (d) of claim 1. Accordingly, with respect to these embodiments, it is simply not possible, based on these embodiments, to define a time range $[t_d; t_r]$ of the scrambled content according to the sending time of a user request, and to apply specific access criteria to the defined time range and, when outside this time range, other access criteria. Features (a) to (d) of claim 1 provide this advantage. Moreover, the advantage provided by the invention as claimed in claim 1 is not recognized by the prior art; it is respectfully submitted that the recognition of this unrecognized advantage argues in favor of patentability of claim 1.

Further, the prior art lacks any teaching or suggestion that the references should be modified in a manner required to meet the claims now presented.

Concerning Chen, it is noted that Chen discloses the use of a time stamp to identify compromised encrypted record. This time stamps are not assigned to ECM message (see paragraph [0078]).

The dependent claims are allowable for at least the reasons set forth above in support of the patentability of claim 1.

Allowance of the application in its present form is respectfully solicited.

END OF REMARKS